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Scientific Selection and Assignment of Men in the Creation of an Organization*

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When we can bring together a group of men so selected and assigned that every individual shall be fitted for his task, adapted to all other units of the group, and attuned to the community spirit, then we shall have the ideal organization for efficiency. Conversely, unless we do so select and assign men, despite all other efforts, efficiency halts and stumbles.

Devices for increasing efficiency have been multiplied, but all authorities agree upon substantially the same fundamental factors: men, money, materials, equipment, and operations.

Men must guide, direct, supervise and train large numbers of other men.

Men must earn, combine and administer funds.

Men must gather, store, carry, choose and shape materials.

Men must invent, perfect, choose, arrange, install and operate equipment.

Men must devise, plan, schedule, perform and control operations.

The largest sums of money, the finest materials, the latest and best equipment, the most cleverly and intelligently devised methods will not be efficient unless there are *men* fitted by nature and training for their tasks, in the right places, at the right time, and with the right training, guidance, direction, and supervision.

The logical beginning, therefore, for an efficient organization is the scientific selection, assignment and handling of men. Notwithstanding this obvious truth, we find haphazard methods almost universal.

In industrial plants it is the general rule to leave selection to foremen, many of whom have been chosen for almost any other reason than their real fitness for their positions. In stores, banks and offices the methods of selection are nearly as unscientific, the most common being the old wasteful one of "hiring and firing."

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The sales manager of a large concern once told me that he tried three hundred candidates before he secured an even passably efficient force of twenty-five salesmen. The cost of engaging, partially training, and finally weeding out the two hundred and seventy-five unfit amounted to over \$90,000! This was the actual money loss. The waste of time, energy and opportunity for profitable sales can scarcely be estimated.

Analyzing the method of selection by foremen, it is easy to prove it inefficient on several counts.

First, there is a lamentable inefficiency of supply.

The foremen do not and cannot take the time or the opportunity to see and select from any adequate number of applicants. They must select from the few who voluntarily apply to them when positions are open. As a general rule, when there are no vacancies, foremen refuse to talk with applicants.

Second, the average foreman does not have time to consider carefully the qualifications of those whom he does see. He has a number of men under his supervision. He is held responsible for a maximum quantity and quality of output.

Third, a foreman is unable to take the time for necessary correspondence in securing men from the outside, even if he has the ability and proper equipment to handle it, which in most cases he has not. He is therefore practically compelled to employ on the principle of "first come, first served," relying upon his power of discharge to eliminate the unfit.

Fourth, even if the foreman could interview all possible applicants, calling them to him from the most likely sources of supply; even if he could give to each one the deliberate consideration required; even if he had the ability and equipment to take care of correspondence, the chances are heavily against his being qualified by nature, knowledge and training to judge accurately of the fitness of men. If he were thus qualified, he would not long continue in the position of foreman. He would quickly be moved higher up.

Perhaps the climax of inefficiency of selection is reached in the case of a large concern recently brought to my attention. There applicants for shop positions are lined up and the superintendent makes his choice by feeling their muscles and engaging those who have the largest and hardest.

A man's value to his employer is not in his large bones and muscles, his weight lifting and strenuous physical labor. Human muscle power is the most expensive form of energy used. A man is valuable in pro-

portion to the thought, the psychical inspiration, and the happiness he puts into his work. A man doing work he does not love lacks enthusiasm, spontaneity, interest, and concentration—therefore, efficiency.

The average man in every walk of life has chosen his work—if, indeed, he can be said to have *chosen* it at all—without vocational guidance. Some have been started upon their careers by fond but mistaken and oftentimes stubborn parents. Others have been compelled by economic necessity—or what they considered necessity—to drop into the first available opening.

With a hundred different vocations from which to choose, the probability of finding the right one by such merely chance methods is obviously but one in a hundred.

The fact, therefore, that a man applies for a certain kind of work is not sufficient indication that he is fitted for that work, and will therefore be efficient and happy in it.

The number of young boys and men who apply merely for a job, without the slightest notion what they want to do or ought to do, is simply appalling. These, having no definite aim in life, become drifters, floaters, and sooner or later a large number of them become unemployables through discouragement and bad habits.

All are familiar with the waste of precious human values suffered by both employers and employes as the result of the present haphazard and unscientific methods of selecting, assigning, and handling the world's workers. Here, indeed, is a vast and practically untouched opportunity for the conservation of our most priceless national resources.

The cause of waste lies in ignorance of human aptitude and the requirements of different kinds of work.

The remedy is obvious. It lies in vocational guidance of the child and instruction of parents.

However, we Americans are so intensely commercial and so short-sighted in everything except money values that to induce universal acceptance of any idea we must hear the jingle of coin and see the glitter of gold. Happily this problem of fitness touches our purses so unmistakably as to be appreciated by the most utilitarian and egoistic.

Last year in a certain large selling organization salesmen in the same territory, handling the same product, under the same management, with practically the same training and experience, varied from \$16,000.00 to \$200,000.00 in their total sales.

Had scientific selection replaced every \$16,000 salesman by a

\$200,000 salesman, the net profits of the company would have been two million dollars higher.

The man who can sell \$200,000 worth of goods requires no more training and supervision than the one who sells but \$16,000—indeed, he usually needs less. Nor are his traveling expenses any higher. The difference lies not in these things, but in his inherent fitness for the work.

Therefore, while we cannot yet give every child competent vocational guidance and educate his parents to coöperate with him and us, we can make—and have made—a profitable start in that direction by selecting and assigning men and women according to their inherent fitness for the work they are to do, thus accomplishing three desirable results, i. e., making them more efficient and happier, increasing the profits of their employers, and demonstrating the practicable application of scientific selection.

This has been done through a properly equipped employment department in charge of expert character analysts who interview, select and assign men.

The functions of this department are:

1. To number all positions and list the qualifications for each.
2. To find, analyze scientifically, and recommend for employment in the work to which they are best adapted all the workers needed.
3. To secure for all positions the very best obtainable human material.
4. To outline readjustment of the workers already employed so as to secure the best results.
5. Gradually to eliminate the unfit and place those retained where they will be the least objectionable.
6. To take steps to secure applications from desirable men not at present obtainable or particularly needed; to analyze and list these as a reserve or source of supply.
7. To keep accurate records of the department and performance of every man:
 - (a) as a means of dealing with the man himself;
 - (b) as a check on the efficiency of the employment department;
 - (c) as a means of determining the trend of the whole organization.
8. To investigate, consider, and bring up for adjustment all cases of inefficiency, discontent, inharmony, and misunderstanding.
9. Taking "competent counsel," to establish a minimum wage rate

for each position, or secure the best human material obtainable for each position at as low a rate as possible commensurate with justice to employer and employe.

10. Systematically to make known the ideals of the organization.
11. To familiarize each worker with the qualities considered to be ideal for his job—then to inspire him to strive for their attainment.
12. To form classes among executives, superintendents, and foremen for inspiration, suggestion, and instruction as to scientific methods of understanding men.
13. To determine and render available as far as possible all the latest genius and special abilities of employes.
14. Beginning, at the top, to endeavor to instill into every individual the "spirit of the hive," the desire to coöperate, to "play the game."
15. As far as possible, to select and educate understudies for every position of importance.

One of the most important functions mentioned is readjustment of the workers already employed.

Mr. Frank G. Gilbreth has said: "The mere fact that a man does not come up to the standard required on a certain job is no sign that he cannot make good at another. I have in mind one man who failed signally at several jobs, but finally hit his pace and became one of the best men I had."

In many organizations there is an unwritten law among foremen and department heads that if a man is unsatisfactory in one department he is not to be employed elsewhere. This is unscientific, wasteful, and discloses a narrow, prejudiced, and wholly selfish point of view.

Not only may a man who is a failure at one kind of work be successful at some other work, but shifting him from the influence of one foreman and placing him under another who is more congenial may make a difference of 50 per cent. in his efficiency.

Recently one of my assistants assigned to a keen, restless, ambitious foreman a young lad who was a quiet, steady, reliable, accurate and faithful worker. His work was entirely satisfactory, but his manner of working so irritated the foreman that he was removed and placed in a similar position under a foreman less erratic. The second foreman to whom he was assigned reports that he is the best worker he ever had.

To have discharged this lad would have been unjust to him and extremely wasteful to the concern.

I have in mind a man who seems to be almost idiotic mathematically. He can scarcely add two and two together and get four for an answer; nor is it easy to make him understand why two and two equals four when the problem is worked out for him by someone else. Yet this same man can read Greek, Latin, Hebrew, Swedish, German, French, Italian, and English rapidly and accurately. He is a ready and forceful writer in all of these languages. If this man were placed in the accounting division he would be summarily discharged as an incompetent, but in the sales department, handling foreign correspondence, he is invaluable to his concern. Yet the father of this young man once insisted that he become a bookkeeper!

In a large concern where scientific employment is now in use a revolutionary change for the better in the very atmosphere and spirit of the whole organization was speedily accomplished at the very beginning of the work by replacing five high executives who were unfitted for their positions with men scientifically chosen for their particular fitness and efficiency. Labor troubles evaporated, hard problems of long standing were easily solved, harmony in the organization took the place of discord, and production leaped within a few weeks to a higher point, both in quantity and quality, than ever before. Such results could not have been attained in years by working from the bottom up.

The executive sounds the keynote for his department. If he is inefficient he demoralizes all his workers. Indeed, very capable men will not continue to work under him. If he is himself efficient he will secure good results from even ordinary workers, and splendid results from good workers, while those who are incapable of advancement will gradually slough off.

The first and most important work of an employment department should therefore be with the executives of the firm.

Having made clear the need for scientific selection and the functions of a department based upon it, we are confronted with the question as to what science or sciences are used.

Any science which reveals the physical, mental or moral nature of man contains valuable data for judging of the particular physical, mental, and moral character, development, qualifications, and aptitude of any individual.

He who would become proficient in human analysis must, therefore, lay tribute upon biology, anthropology, physiology, anatomy, physiological psychology, history, political economy, and sociology. He must also make for himself and secure from others the results of

years of patient, painstaking, widely extended scientific research into the workings of the law of cause and effect, both in nature and human nature.

Man is the result of countless centuries of evolution through inferior forms. His color, form, proportion, bodily texture, and mental and moral characteristics are in a sense a summing up of all the results of environment and experience through which he has passed from generation to generation during his evolution.

The trained paleontologist finds the fragments of a prehistoric animal, from them fashions the entire body, and determines its habits and traits through deductive reasoning. How infinitely easier to take a living, breathing human being and, through the application of judgment, guided by knowledge and reason, determine what he is best fitted to do!

It is a law of nature having universal application that *the size, color, form, proportion, texture, consistency, and structure of an object indicates its function and use.*

We determine the difference between an orange and a shotgun through comparison of size, color, form, proportion, texture, consistency, and structure.

The same law is applicable without modification to human beings.

It is obvious that size of body fits or unfits a man for a given kind of work. If the work requires covering great distances, the short, stout man is sorely handicapped because he is not built for easy locomotion. On the other hand, much stooping or bending is difficult for the tall, rangy-built man.

Blondes and brunettes do not work in the same manner. They naturally incline to different lines of work. Generally speaking, blondes are speculative and optimistic; usually mild and good-natured; often inventive; like to conceive the idea or plan for someone else to work out. They naturally incline to aggressive work, such as salesmanship, advertising, and promotion.

Brunettes incline to conservatism rather than speculation; often serious-minded; sometimes inclined to gloominess; like to work out and perfect the plan which some other mind has conceived.

These are but suggestive examples which any one may observe and test for himself.

Everything about a man indicates his character. In order to understand him we observe, first, his body.

The body is the soul's equipment, without which mind could not function.

The body is the expression of the soul, and reflects its character with absolute fidelity.

To understand the physical construction of a man, therefore, is to be able to measure his inherent capacity and determine his natural aptitudes.

Second, we study expression, which reveals itself in language, voice, gesture, handwriting, the eyes, the walk, etc.

"Normally," says Mantegazza, "every thought and emotion takes form in action. A transitory emotion has a fugitive expression which leaves no trace, but when it is repeated several times it leaves on the face and other parts of the body a lasting impression which may reveal to us a page in a man's history."

Expression tells us what the man has done with his inherited qualities, and what habits he has acquired.

Third, we must analyze accurately his thoughts and actions, checking them up with his natural aptitudes and acquired habits.

Knowing thus how to recognize in the individual inherent capacity, natural aptitudes and acquired habits of mind and body, and being familiar with the requirements for any particular task, it is comparatively easy to fit the two together.

Like every other kind of work, it takes certain natural qualities of mind to become a good judge of human values. There are no contradictions in human nature, but there are many variables, some of them almost impossible to account for.

There are further difficulties to be encountered because of the impossibility of setting up fixed standards. Human worth is relative or comparative. It, therefore, takes, for best results in analysis, a wide experience and acquaintance with different types of mind.

To be a good judge of men requires the judicial mind.

One must avoid hasty and illogical judgments, which are the result of failure to take all the evidence into consideration. Founding a judgment upon size alone or color alone, or, indeed, upon any *one* indication of character, is to fall into error.

Perhaps the most common fault in measuring others is prejudice. This is the result of personal bias. Very few are able to take scientific data and apply it to an individual without being influenced by emotion. Feeling is substituted everywhere and by almost everyone for science.

But, difficult as it is, the problem of placing the right man in the right place is being successfully solved for a continuously increasing number of men and women.